

APPENDIX 1-C

GLOSSARY OF KEY TERMS

Revised May 10, 2004

Appendix 1-C

Glossary of Key Terms

1-year Flood: The flood typically occurring or being exceeded in any given year.

2-Year Flood: The flood having a fifty percent chance of being equaled or exceeded in any given year.

5-Year Flood: The flood having a twenty percent chance of being equaled or exceeded in any given year.

10-Year Flood: The flood having a ten percent chance of being equaled or exceeded in any given year.

Base Flood or 100-Year Flood: The flood having a one percent chance of being equaled or exceeded in any given year.

Compensatory Storage: Replacement of storage volume that is hydrologically equivalent to lost storage when encroachment occurs in the floodplain or floodprone area.

Conveyance structure: A pipe, open channel, or other facility that transports runoff from one location to another.

Drainage criteria: Specific guidance provided to the engineer/designer to carry out drainage policies. An example might be the specification of local design hydrology (“design storm”).

Existing Urban Area: All areas inside the corporate limits of the City of Lincoln. Existing Urban Area shall also mean those areas outside the corporate limits having a zoning designation other than AG Agriculture and AGR Agricultural Residential, as of the effective date of this ordinance.

FEMA: The Federal Emergency Management Agency.

Flood Fringe: That portion of the floodplain which is outside of the floodway

Flood Insurance Rate Map (FIRM): Flood Insurance Rate Map (FIRM) shall mean the September 21, 2001 Flood Insurance Rate Map and any revisions thereto, on which FEMA has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Floodplain: Those lands which are subject to a one percent or greater chance of flooding in any given year, as shown on the Flood Insurance Rate Map (FIRM) issued by FEMA for Lancaster County, Nebraska and incorporated areas, as amended.

Floodplain planning/floodplain management: Technical and nontechnical studies, policies, management strategies, statutes and ordinances that collectively manage floodplains along rivers, streams, major drainageways, outfalls, or other conveyances. The federal government normally plays a major role in floodplain planning and management, whereas in urban stormwater management and design, local governments dominate the decision-making process.

Floodprone Area: Those lands which are subject to a one percent or greater chance of flooding in any given year, as determined by hydrologic and hydraulic studies completed by the City or other government agency, or other acceptable source as approved by the City where this is the best available information.

Floodway: The channel of a river or other watercourses and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Major drainageway: A readily recognizable natural or improved channel that conveys runoff that exceeds the capacity of the minor drainage system, including emergency overflow facilities.

Major system: The portion of the total drainage system that collects, stores, and conveys runoff that exceeds the capacity of the minor system. The major system is usually less controlled than the minor system, and will function regardless of whether or not it has been deliberately designed and/or protected against encroachment, including when the minor system is blocked or otherwise inoperable. It may be collinear with, or separate from, the minor system. It should be noted that there are those who object to the use of the terms “major” and “minor” to describe portions of the drainage system, perhaps because these terms imply that the minor system is less important. Other terms (primary system, convenience or basic system, overflow system, major/primary drainage ways, subordinate system, etc.), have been suggested. Major/minor are used in this Manual because they seem to be the most widely used terms.

Master drainage plan: The plan that an engineer/designer formulates to manage urban stormwater runoff for a particular project or drainage area. It typically addresses such subjects as characterization

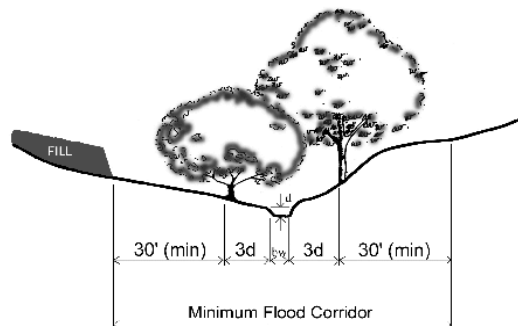
Appendix 1-C

Glossary of Key Terms

of site development; grading plan; peak rates of runoff and volumes of various return frequencies; locations; criteria and sizes of detention ponds and conveyances; measures to enhance runoff quality; salient regulations and how the plan addresses them; and consistency with secondary objectives such as public recreation, aesthetics, protection of public safety, and groundwater recharge. It is usually submitted to regulatory officials for their review.

Minimum Flood Corridor: Minimum flood corridor shall mean the existing channel bottom width plus 60 feet plus 6 times the channel depth and the corridor will be centered on the channel, as shown in Figure 1-C-1 below, or aligned such that the corridor follows the natural flow of flood waters.

Figure 1-C-1: Minimum Flood Corridor



Minor or primary system: The portion of the total drainage system that collects, stores and conveys frequently-occurring runoff, and provides relief from nuisance and inconvenience. This system has traditionally been carefully planned and constructed, and normally represents the major portion of the urban drainage infrastructure investment. The degree of inconvenience the public is willing to accept, balanced against the price it is willing to pay, typically establishes the discharge capacity or design recurrence frequency of a minor system. Minor systems include roof gutters and on-site drainage swales, curbed or side-swaled streets, stormwater inlets, underground system sewers, open channels and street culverts.

Multiple-purpose facility: An urban stormwater facility that fulfills multiple functions such as enhancement of runoff quality, erosion control, wildlife habitat, or public recreation, in addition to its primary goal of conveying or controlling runoff.

New Growth Areas: Those areas outside the corporate limits of the City of Lincoln which are zoned AG Agricultural or AGR Agricultural Residential as defined by City ordinances.

Outfall facility: Any channel, storm drain, or other conveyance receiving water into which a storm drain or storm drainage system discharges.

“Risk-based” design: Design of urban stormwater management facilities not only on the basis of local standards, but also on the basis of the risk (cost) of the flow exceeding a selected design. Virtually all stormwater management projects have some component of risk which is inherent in selection of a design return frequency. Risk may also account for special upstream or downstream hazards that would be posed by adherence to some recommended standard. For example, the designer of culverts in a subdivision might choose to upsize particular storm drains from a 10-year to a 50-year basis to protect properties, or to make other provisions to secure emergency discharge capacity.

Special structures: Those components of urban drainage systems that can be thought of as “features” or “appurtenances” such as manholes, inlets, energy dissipators, transitions, channel slope protection, detention ponds and dams, and outlet works.

Appendix 1-C

Glossary of Key Terms

“Standard-based” design: Design of urban stormwater management facilities based on some specified set of regulatory standards. An example is the stipulation in local drainage policies that culverts for a given subdivision all be designed to pass the 100-year flood before road overtopping.

Storm drain: Often buried pipe or conduit, typically referred to as storm sewer that conveys storm drainage, also includes, curb & gutter, grate & curb inlets, swales, open channels, and culverts.

Stormwater detention: The temporary storage of stormwater runoff in ponds, parking lots, depressed grassy areas, rooftops, buried underground tanks, etc., for future release. Used to delay and attenuate flow, normally drained between storms.

Stormwater retention: Similar to detention except the facility may have a permanent pool of water or wet land that does not drain between storms.

Stream Crossing Structures: Structures used to convey pedestrians, motor vehicles, and/or utilities across drainageways. Stream crossing structures are composed of the structure, abutments, guard rails, fill, and other structural appurtenances that are generally perpendicular to the conveyance of flow within the floodplain or floodprone area.

Urban area: Land associated with, or part of, a defined city or town. This Manual generally applies to urban or urbanizing, rather than rural, areas.

Watershed Master Plan: A plan generated by the City or by the City in cooperation with other agencies, which includes hydrologic and hydraulic modeling for the base flood event, including floodplain elevation and limits.